

COMMENTARY

Evidence, expertise, and patient/family preferences to maximize health for older adults with implications for evidence-based practice

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Abstract

Background: As Americans live longer and with chronic conditions, the healthcare system, researchers, faculty, practicing providers, patients, and families must adapt to changing societal needs and goals.

Aims: The aim of this commentary was to offer recommendations that align with the six vital directions to improve the health care and quality of life for older Americans.

Methods: This article expands upon the six vital directions from an evidence-based practice (EBP) perspective that values the three legs of the EBP stool: (1) research evidence, (2) clinician expertise, and (3) patient preferences, values, and circumstances.

Results: The recommendations reflect the scientific literature, our expertise in EBP and research, our nursing roles and expertise, and our experiences in the care of our older parents. By sharing our experiences as nurse scientists and daughters, we offer insight to raise the healthcare bar for older adults through EBP and meaningful, person-centered care.

Linking Action to Evidence: Vital directions for improving the health care and quality of life for older Americans include promoting interprofessional education to create an adequately prepared workforce; researching and implementing pathways to minimize the social determinants of health for older adults; disseminating findings that remediate older adult health disparities; innovating approaches for managing chronic health conditions at home; and studying and implementing approaches for allocating resources for end-of-life care that are satisfying for the patients, their family, and clinicians.

KEYWORDS

case studies/case report, evidence-based practice, gerontology/geriatrics, nursing practice, patient outcomes, patient outcomes/healthcare outcomes/treatment outcomes

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INTRODUCTION

Recently *Health Affairs* reported six vital directions for improving health care for older adults, which resonated with us as nurses, scientists, and daughters: (1) create an adequately prepared workforce, (2) strengthen the role of public health, (3) remediate health disparities, (4) develop new approaches for care delivery like telehealth, (5) allocate resources for end-of-life care, and (6) redesign long-term services and supports (Fulmer et al., 2021). The aim of this commentary is to offer recommendations that align with these six vital directions from an evidence-based practice (EBP) perspective that values the three legs of the EBP stool: (1) research evidence, (2) clinician expertise, and (3) patient preferences, values, and circumstances (Figure 1). Our ultimate goal is to raise the healthcare bar for older adults through both an EBP and patient-centered lens, and we believe that targeting the six vital directions holds promise for reaching this goal. We will share our experiences as daughters of an older adult navigating the health care system, followed by evidence-based recommendations for each vital direction.

Case study #1

My (Inga) 79-year-old father experienced a massive stroke on November 10, 2017, while living at home alone. Miraculously, he survived the stroke and excelled in his physical rehabilitation. However, witnessing an older adult navigate the complicated United States (U.S.) healthcare system from far away posed its challenges. This experience was life-changing, and I oscillated between roles; sometimes, my role was the nurse who reinforced the care plan; other times, I was the scientist who read about scientific discoveries that could help Dad. But most precious were the moments when my role was to be the loving daughter and adult friend, sympathizing with his difficulty in abiding by permanent lifestyle changes to maintain health.

Case study #2

My (Sharon) 75-year-old mother, with a 10th-grade education, presented to the emergency room (ER) with a sudden onset of

excruciating and disabling knee pain. They drew and analyzed laboratory data, performed an x-ray, and discharged her home with narcotics. Mom returned to the ER the following day with continued disabling pain and shortness of breath. Her laboratory data (abnormal the day before) looked worse, and the cardiologist whisked her to angioplasty because she was experiencing a myocardial infarction. The diagnostic work-up revealed her knee was infected, and Mom was septic. She was hospitalized for two weeks and then recovered in a skilled nursing facility, where she stayed for six weeks and finally left against medical advice. While Mom's well-intended healthcare team followed evidence-based protocols, her siloed care lacked patient-centeredness and the complete picture, leading to numerous challenges that continue to plague her.

Case study #3

Thirteen years ago, my (Jacqueline) grief-stricken Mom drove my never-before hospitalized, 72-year-old Dad to the local community emergency department for chest pain. In the emergency department, the healthcare team delivered three resuscitation attempts. The physicians determined Dad experienced an acute myocardial infarction and needed a cardiac catheterization with embolectomy. Unfortunately, the weather conditions made the 30-minute helicopter flight to the nearest cardiac catheterization laboratory impossible, so Dad endured the 60-minute ambulance drive. Although he arrived alive, Dad missed the 90-minute golden window for cardiac catheterization. As I traveled the two-hour distance to meet them, I remember begging for a chance to say goodbye.

These stories reflect the widespread fragmentation of the current US health care system and the dark reality of watching one's parents age and develop significant health issues, decline in independence, and, unfortunately, pass from this world. The remainder of this commentary will be structured as recommendations for the six vital directions for improving health care for older adults. Our recommendations reflect scientific literature, our expertise in EBP and research, our extensive nursing roles and expertise, and our personal observations of the care of our older parents. Table 1 outlines the best practices (evidence), expertise (clinician action), and patient preferences to actualize health for older adults to promote the highest quality of life throughout the lifespan.



FIGURE 1 Evidence-based practice (EBP) triad

EVIDENCE-BASED RECOMMENDATIONS TO CREATE AN ADEQUATELY PREPARED WORKFORCE

Case study #3

Dad (Jacqueline) survived to thrive following ventricular ablation and insertion of an automatic implantable cardioverter defibrillator (AICD) device. Thirteen years later, my 85-year-old father became the poster child for effective congestive heart failure and

TABLE 1 Evidence, expertise, and patient preferences to maximize health for older adults

Six vital directions (Fulmer et al., 2021)	Evidence (nurse scientist)	Expertise (clinician)	Patient preferences (older adult)
1. Create an adequately prepared workforce	<ul style="list-style-type: none"> • Model evidence-based communication strategies • Teach evidence-based geriatric curriculum • Promote interprofessional education 	<ul style="list-style-type: none"> • Review the health history in the I • Use therapeutic communication skills • Be competent in geriatric care 	<ul style="list-style-type: none"> • Listen to me • Don't judge me based on past behaviors • Involve my family (if that is what I want)
2. Strengthen the role of public health	<ul style="list-style-type: none"> • Study and implement effective strategies that improve public health • Research and implement material, psychosocial, and behavioral pathways to minimize SDOH 	<ul style="list-style-type: none"> • Promote physical activity and autonomy • Refer the person to community resources (transportation, low-cost medication resources) 	<ul style="list-style-type: none"> • Engage in healthy behaviors every day • Ask my doctor/provider about resources to help me live at home
3. Remediate health disparities	<ul style="list-style-type: none"> • Study interventions to remediate health disparities among older adults living in the community • Disseminate effective findings that remediate health disparities 	<ul style="list-style-type: none"> • Attend education offerings to increase personal awareness of how bias, stereotyping, prejudice, and clinical uncertainty may contribute to disparities in health care • Assess each patient's SDOH • Be culturally sensitive and humble • Provide health information that matches the patient's health literacy • Refer to a community health worker 	<ul style="list-style-type: none"> • Be social to prevent feeling lonely • Work on developing trust with my doctor/provider • Talk with my doctor/provider before refusing or stopping a treatment • Ask questions when I don't understand
4. Develop new approaches for care delivery like telehealth	<ul style="list-style-type: none"> • Study innovative approaches for managing chronic health conditions at home 	<ul style="list-style-type: none"> • Assess the person's preferences for care delivery and communication • Teach about various telehealth options and identify individual preferences and resources 	<ul style="list-style-type: none"> • Tell my provider about my computer skills • Tell my provider how I prefer to meet (in-person, virtual) and receive health information (conversation, pamphlet, video)
5. Allocate resources for end-of-life care	<ul style="list-style-type: none"> • Study and implement approaches for allocating resources for end-of-life care that are satisfying for the affected person/family and clinician 	<ul style="list-style-type: none"> • Build a picture of the person and their circumstances • Initiate the conversation • Consult palliative care 	<ul style="list-style-type: none"> • Learn about end-of-life care • Consider what I want for end-of-life care (living will, advanced directive) • Talk with my doctor/provider and family
6. Redesign long-term services and supports	<ul style="list-style-type: none"> • Study person-centered care in the home 	<ul style="list-style-type: none"> • Accept risk in the short and long term • Promote living at home 	<ul style="list-style-type: none"> • Use my cane or walker all the time (to prevent injury) • Use other tools and resources to optimize my independent living

Note: From Fulmer et al. (2021).

Abbreviation: SDOH, Social Determinants of Health.

chronic obstructive pulmonary disease management. Despite the widespread availability of the electronic health record (EHR), the provider punctuated every healthcare visit or every six-month pulmonary function test with the same questions: "How tall are you? Do you smoke? When did you start? When did you quit?" I wondered about the provider's communication skills. Upon answering the questions (long ago recorded in the EHR), Dad's eyes were downcast as the air filled with regret about his 40-year smoking history. Always the elephant in the room. Yet, he was proud and independent, weighed, and recorded his weight daily, walked a

daily mile, attended cardiac rehab three times a week, and did everything healthcare professionals asked him to do. The heartache I felt for him was palpable as I struggled to say, "The information is in his chart," and with my eyes, "Please don't ask him again."

Adequate preparation to provide quality care for older adults requires geriatric expertise, communication skills, empathy, and, ideally, an intimate knowledge of the patient's preferences, values, and circumstances long before a life-altering health event occurs. Communicating with older adults about self-management requires a healthcare workforce with a strong understanding

of person-centered care and shared decision making (Lawless et al., 2021). Most health professions (e.g., medicine, nursing, physical therapy, social welfare, etc.) have geriatric curricular competencies as part of their entry into practice education. Students who participate in interprofessional education (IPE) and training report improved teamwork and communication skills, and they recognize the roles and value of other professions (Gentry et al., 2021).

Using an IPE model with geriatric curricular competencies is a best practice suggestion to create an adequately prepared workforce. A well-prepared workforce includes clinician competencies of empowering older patients and families in care decisions; helping patients feel comfortable and cared for; conducting comprehensive assessments that address physical, social, and psychological challenges due to living with chronic conditions; developing comprehensive plans of care; promoting activities related to mobility, self-care, and domestic life; and personal self-care (Abdi et al., 2019; Bahrami et al., 2019; Lawless et al., 2021). The Geriatrics Champions Program (GCP) is one example of a team-based learning (TBL) activity to train and prepare the interprofessional workforce to care for older adults that blends interprofessional geriatrics curricular competencies (Bhattacharya et al., 2021). Program outcomes support IPE with TBL because teams performed about 30% better than individuals on assessment tests (Bhattacharya et al., 2021). Shorter programs, such as a one-day workshop based upon the 4Ms (what matters, medication, mentation, and mobility) for an age-friendly health system, may also be a viable alternative for preparing healthcare professionals (Hawley et al., 2021). Health care preparation also requires communication skills, empathy, and professionalism (Gellis et al., 2019; Masud et al., 2022). Engaging caregivers of older adults is also a best practice for IPE curricula (Farrell et al., 2018).

EVIDENCE-BASED RECOMMENDATIONS TO STRENGTHEN THE ROLE OF PUBLIC HEALTH

Case study #1

My (Inga) father was motivated to make significant lifestyle changes after the stroke. Previously, my father chose not to engage in daily exercise other than weather-permitting sporadic walks. A monthly gym membership was too expensive. Medicare covered the cost of outpatient physical rehabilitation after hospital discharge, which Dad truly enjoyed due to the encouraging physical therapy team. After the Medicare physical therapy payments ceased, the gym owner provided a reduced membership rate of \$10/month for Dad to continue exercising, which he did faithfully. Dad, the man who never exercised, became a regular at the gym! I witnessed the powerful effect of income, a social determinant of health, on an older adult's physical activity and quality of life.

The social determinants of health (SDOH) model links social structure to health and disease through material, psychosocial, and behavioral pathways (Marmot & Wilkinson, 2006). Over the life course,

advantages or disadvantages in health and associated social determinants accumulate (Marmot et al., 2012). Therefore, experts recommend designing prevention programs for older adults with lower incomes and strategies to reduce financial barriers to healthcare access (Marmot et al., 2012). For example, a primary care liaison care model is a feasible program to assist older adults with arranging support services such as transportation, in-home care, food, or legal advice (Kim et al., 2021).

It is essential to understand the relatively minor role medical care plays in ensuring better health outcomes. Data suggest that only 10%–20% of medical care accounts for modifiable contributors to healthy outcomes for a population (Hood et al., 2016). Nearly 50% of contributors are socioeconomic factors. For example, socioeconomic status significantly relates to overall physical activity (O'Donoghue et al., 2018). Physical activity in older adults is critical because sedentary behavior is significantly associated with mortality in community-dwelling older adults (Rojer et al., 2020). Policies and programs that encourage community changes (such as safe walking spaces) complement medical care with behavior change (Magnan, 2017). Advancing the role of public health and public policy and payment models has demonstrated improved health outcomes (Magnan, 2017).

EVIDENCE-BASED RECOMMENDATIONS TO REMEDIATE HEALTH DISPARITIES

Case study #1

Dr. H served as Dad's (Inga) primary care physician for over 20 years. Dad was not allowed to drive after the stroke until his primary care physician provided clearance. Dr. H. knew that Dad valued his independence and was compliant with medications, medical tests, and orders. I traveled mid-week to accompany Dad to his first post-stroke office visit. I witnessed Dad's emotional plea to Dr. H to reinstate his driving privileges. Driving a car represented autonomy, renewed social interaction, and a return to everyday life. Unfortunately, his community did not offer practical public transportation. Perhaps Dr. H sensed early post-stroke depression. When Dr. H approved Dad's driving privileges with strict restrictions (daytime only, grocery store, gym, and church), my father wept tears of relief and expressed his gratitude. I did not recognize the effect of social isolation on Dad, but the doctor did. Without the resources to overcome social isolation from limited transportation, my Dad's quality of life and well-being deteriorated.

Remediating health disparities requires a person-centered care (PCC) framework. PCC requires providers to elicit an individual's values and preferences which guide all aspects of care to support healthy life goals (The American Geriatrics Society Expert Panel on Person-Centered Care, 2016). The beneficial outcomes of PCC include improved patient satisfaction, improved patient well-being, improved patient quality of life, and increased knowledge about health (Burgers et al., 2021). Two best practices to remediate health disparities in older adults include community health workers and tailored interventions. For example, community health workers (CHWs) have demonstrated improved healthcare use and health behavior

with improved health outcomes among ethnic minority older adults (Verhagen et al., 2014). However, a 2018 systematic review of 29 studies with interventions to improve initiation of mental health care among racial-ethnic minority groups had only five studies that targeted older adults, with varied interventions (Lee-Tauler et al., 2018). There is vast opportunity for research interventions to remediate health disparities among older adults living in the community.

Reducing healthcare disparities requires a strong focus on studying the mechanisms and pathways for the SDOH (Palmer et al., 2019). Moreover, clinician teams must address implicit bias with personal identification of how one's preconceptions may impact the care of minorities and underserved populations (Gonzalez et al., 2021; Thomas & Booth-McCoy, 2020). For example, in case study #2, the lack of health literacy of the patient and limited education left her not understanding much of the medical language, which her daughter had to manage. Implicit biases also reflected impatience with the patient's lack of understanding and follow-up questions.

EVIDENCE-BASED RECOMMENDATIONS TO DEVELOP NEW APPROACHES FOR CARE DELIVERY LIKE TELEHEALTH

Case study #2

My (Sharon) mother attempted to use telehealth a few times to avoid contracting the coronavirus disease (COVID-19) during the pandemic. However, given her limited technology literacy, I arranged and navigated the telehealth visit. Mom preferred to communicate in person or by phone to remain independent. She did not express interest in learning how to use an electronic tablet, like an iPad, nor did she have the memory or comprehension to use applications on a smartphone. As a result, technology for healthcare delivery created enormous frustration, stress, and anxiety.

Telehealth is a feasible and acceptable method to deliver health care for older adults living in the community (Batsis et al., 2019). Healthcare providers may optimize and tailor care for older adults using an online geriatric assessment within telehealth services. A systematic review of self-management interventions for older adults found the largest number of effective interventions for mobility and falls, with positive effects on mobility, pain, social support, comorbidity, and medication management (Donison et al., 2021). That said, healthcare providers must recognize and validate older adults' preferences for care delivery and communication. Older adults will likely become more technically literate with time as technology continues to infiltrate society. However, even if the ability to navigate technical systems improves, some older adults with declining cognitive impairment and loss of sensory function may find telehealth challenging. Older adults may accept alternate approaches for managing chronic conditions, such as using home devices that provide digital biomarkers for their health assessment (Piau et al., 2021). Delivering health care at home using an advanced practice provider-led multidisciplinary, person-centered approach has decreased 30-day

readmission rates and reduced overall costs (Takahashi et al., 2020). In summary, community-dwelling older adults need numerous approaches to healthcare delivery that promote autonomy and consider the unique patient circumstances.

EVIDENCE-BASED RECOMMENDATIONS TO ALLOCATE RESOURCES FOR END-OF-LIFE CARE

Case study #3

The careful management of my Dad's (Jacqueline) disease resulted in only three admissions during the 13-year healthcare journey. The last admission was the toughest one. Fully vaccinated, Dad died of COVID-19 complications due to his underlying conditions. We were hopeful the first 10 days, as Dad responded to treatment, and his will to survive took over. Even as he struggled to breathe, he remained optimistic, but his oxygen saturation stayed below 80% despite being on 100% hi-flow. The end-of-life experience was dizzying; traveling health care clinicians alternated care responsibilities, each provider needing a recount of Dad's history. Meanwhile, rotating hospitalists competed with cardiac and pulmonary specialists on the best treatment options. Hanging in the balance were Dad and his wife of 61 years. Had the healthcare team considered Dad's patient preferences and values, they would have known that he, steeped in faith, was focused on the care of his soul, and he did not want to hear the word hospice. Instead, he wanted to talk about his life in review, pray with his wife and children, and discuss comfort care.

A few best practices for providing supportive care in the hospital for older adults include communicating and connecting with the patient, engaging the caregiver or family, and building up a picture of the person and their circumstances (Nicholson et al., 2017). However, those receiving end-of-life care while hospitalized are often unable to choose patient-directed interventions given their unstable conditions. Thus, experts recommend system-level changes that benefit everyone during end-of-life care in the hospital setting (Waller et al., 2017). For example, clinicians may offer multiple interventions delivered in tandem, such as palliative care consultations, advance directives discussions (repeated), family meetings, basic nursing care, preferred management of pain and discomfort, spiritual care, and consideration of home care (Blinderman & Billings, 2015; Waller et al., 2017).

EVIDENCE-BASED RECOMMENDATIONS TO REDESIGN LONG-TERM SERVICES AND SUPPORTS

Case study #2

The healthcare team encouraged my Mom (Sharon) to start walking daily to build her exercise tolerance. The cardiac rehabilitation specialist failed to recognize Mom's knee pain interfered with

walking, and her priority healthcare need was physical therapy. Unfortunately, Mom could not start physical therapy (PT) quickly due to Medicare rules surrounding payment for home PT after leaving a skilled nursing facility against medical advice. I had to work with the primary care physician who petitioned Medicare to provide this service, which delayed cardiac rehabilitation. Although the cardiologist prescribed evidence-based practices such as cardiac rehabilitation, Mom's ability to access such services was impossible due to her immobility and transportation limits. The team missed conducting a comprehensive assessment to understand the patient's conditions, mobility, and resources (internal and external). Mom would not have received outpatient physical therapy without my healthcare knowledge and navigation skills.

We need several strategies to redesign new delivery care models to keep older adults with chronic conditions and multi-treatment needs living at home. Experts predict the future of social and health care for older adults will shift towards extending the quality of life (rather than resolving short-term acute crises) and controlling acceptable risk in the short and long term (Amalberti et al., 2019). Assistive technology (AT) that may promote older adults' ability to live independently at home include devices such as canes, walkers, grab bars, speech synthesizers, and wheelchairs (Brummel-Smith & Dangiolo, 2009). Caregivers may reduce older adult fall risk by renting lift equipment and a hospital bed with side rails. Nurses need to instruct caregivers about safe patient handling and movement techniques, recognizing that equipment is the best way to reduce injury or falls. In our experience, a hospital bed, plastic carpet protectors to maneuver lift equipment in carpeted bedrooms, a powered lift recliner for standing up from the chair, a commode (as an alternative to a toilet), and a ramp to wheel the older adult in and out of the house for daily fresh air and visits to the doctor's office helped extend the quality of life. However, providers must emphasize consistent use of AT-like canes and walkers for community-dwelling older adults because they may perceive they do not need the device or forget to use it (Luz et al., 2017).

Linking evidence to action

- Promote interprofessional education to create an adequately prepared workforce to care for older adults
- Research and implement material, psychosocial, and behavioral pathways to minimize the social determinants of health for older adults
- Disseminate effective findings that remediate health disparities among older adults
- Design innovative approaches for managing chronic health conditions at home
- Study and implement approaches for allocating resources for end-of-life care that are satisfying for the affected person/family and clinician

CONCLUSIONS

Person-centered care for older adults requires new approaches that prepare a skillful workforce, integrate public health roles and functions, prioritize reducing health disparities, leverage technology as appropriate, engage end-of-life resources for holistic care, and embrace chronic disease models to optimize quality of life and functioning. Actualizing this type of approach and the health of older adults requires the lens of the three-legged stool of EBP. We offer a unique perspective as evidence producers and appraisers (nurse scientists), clinicians (nurses), and daughters.

Our takeaways as nurse scientists are to conduct research to narrow the gaps in the literature, ensure evidence-based strategies for older adult health, remediate disparities, and promote geriatric interprofessional education. As clinicians, we must be competent in geriatric care, culturally sensitive, and humble when caring for older adults and listen to family members and caregivers. Finally, as daughters representing the patient/caregiver perspective, we can practice gratitude, reminisce with love, celebrate small clinical wins, and be strong older adult care advocates. Through personal reflection and EBP, all clinicians have the potential to promote the highest quality of life throughout the lifespan. Because in the end, we are all aging and will need older adult care models that honor our uniqueness, humanity, and dignity.

CONFLICT OF INTEREST

There is no funding source (grants or institutional or corporate support) for the submission. We have not submitted or presented this paper at a meeting.

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